Fluids and Combustion Facility
Combustion Integrated Rack

Details

Gas Bottles

Combustion Chamber

Power Controller (EPCU)

Active Rack Isolation System

International Standard Payload Rack (ISPR)

Optics Plate

Input/Output Processor (IOP)
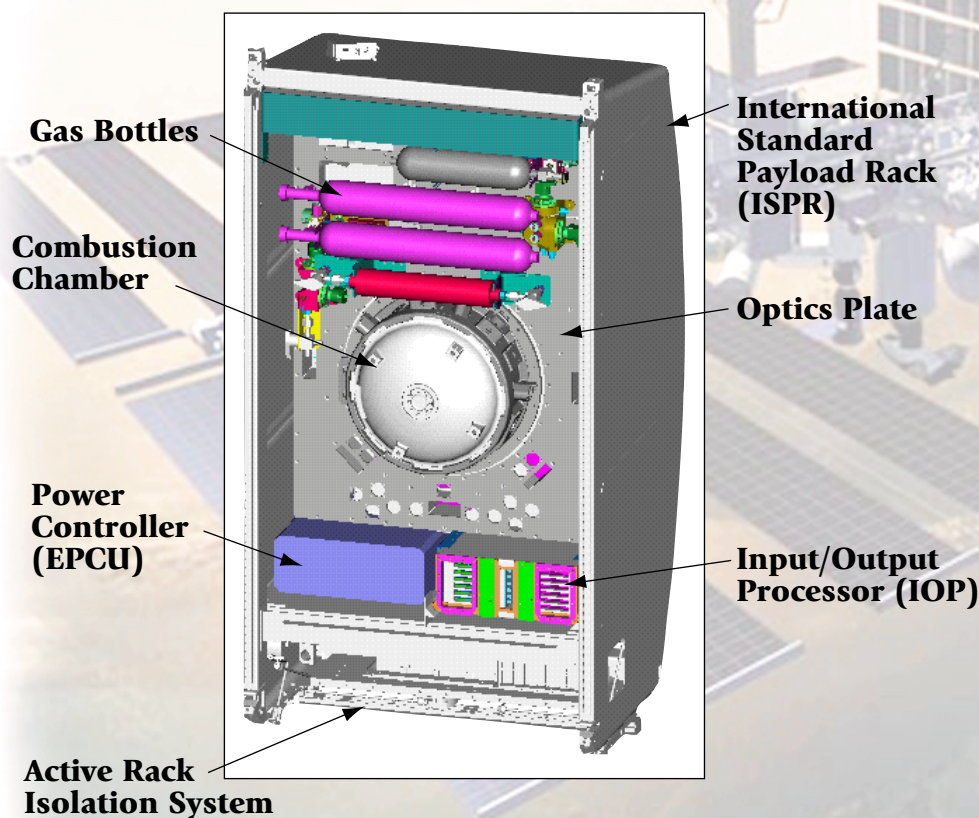
Primary Components:

◆ **International Standard Payload Rack**
  – **Active Rack Isolation System**
◆ **Combustion Chamber**
  – **80 L, 8 windows**
  – **PI-specific hardware interfaces**
◆ **Optics Bench**
  – **Holds chamber, diagnostics, gas supply**
  – **Access to both sides for changeouts**
◆ **Gas Supply System and Vent**
  – **Gas blending and delivery**
  – **Filters**
◆ **Diagnostics**
  – **Visible, IR, UV Cameras; illumination sources**
  – **Power, control, data acquisition for PI-provided diagnostics**
  – **Image processing and storage**
◆ **Data Acquisition and Control**
  – **12 bit system**
  – **48 analog input, 6 analog output**
  – **Data downlinking**
◆ **Environmental Control**
  – **Air and water cooling**